

CROW WING COUNTY

Snow Event 12-2023-17 March 22, 2023



| Reported Event Conditions | |
|---------------------------|------------|
| Date: | 3/22/2023 |
| Event No: | 12-2023-17 |
| Begin Time: | 3/21 3PM |
| End Time: | 3/22 6AM |
| Weather: | Snow |
| Precipitation: | 5" Snow |
| Temperature: | 35/15 |
| Wind: | 10-30 MPH |

| Event Costs | |
|----------------|-----------------|
| Salt | \$13,050 |
| Sand | \$0 |
| Brine | \$754 |
| Equipment/Fuel | \$23,595 |
| Personnel Reg. | \$5,062 |
| Personnel OT | \$2,442 |
| Total | \$44,903 |
| Cost Mile | \$80 |
| Season Total: | 2.12M |

| Priority By Route | |
|-------------------|------|
| Priority 1 | |
| % Target 1A Met: | 100% |
| % Target 1B Met: | 100% |
| Priority 2 | |
| % Target 2A Met: | 100% |
| % Target 2B Met: | 100% |
| Priority 3 | |
| % Target 3A Met: | 100% |

— MnDOT Highway

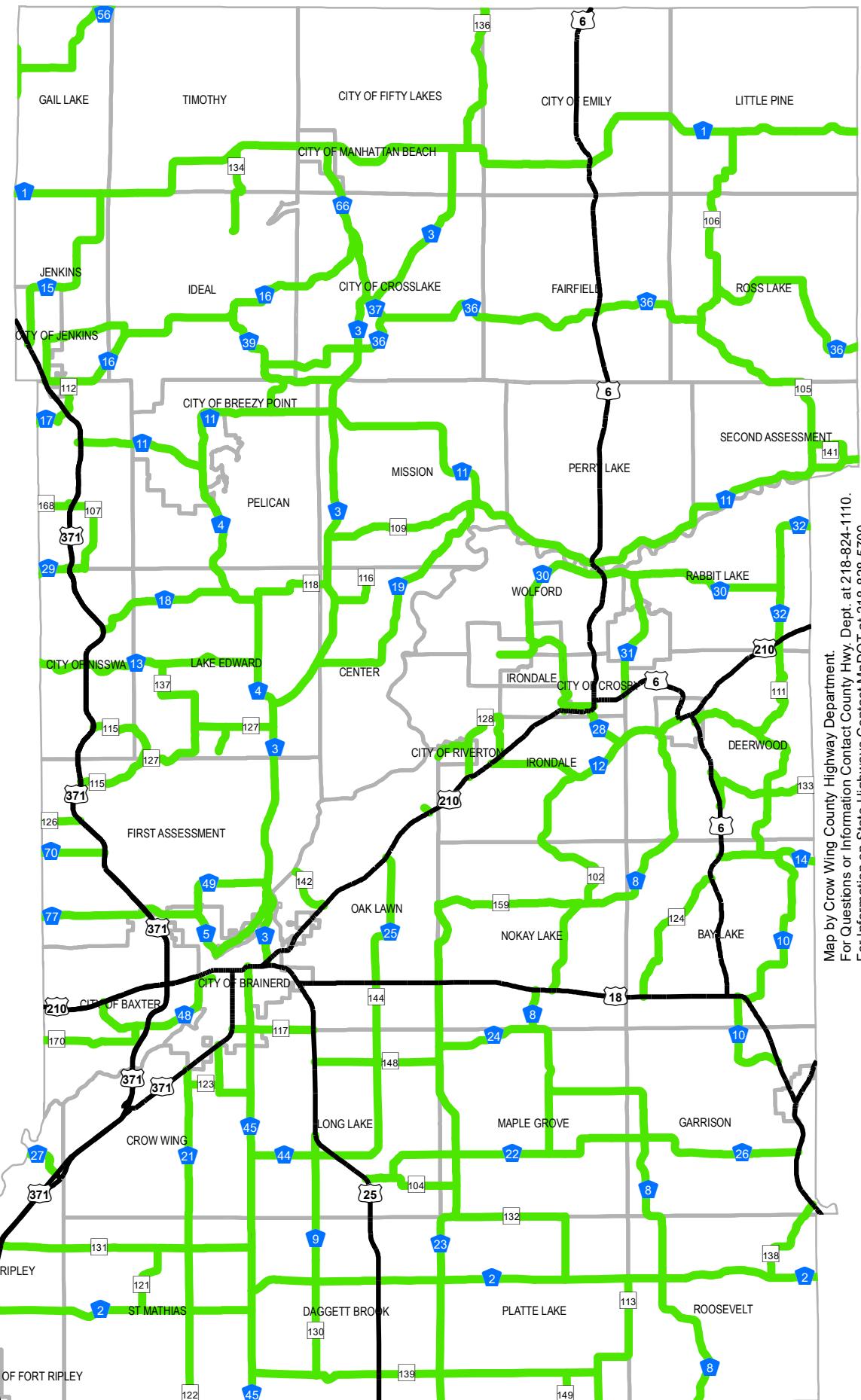
Route Priority

- 1 (ADT>5000)
- 2 (500>ADT<5000)
- 3 (ADT<500)

Route Target

- Target Achieved
- Target Partly Achieved
- Target Not Achieved

Report Date: 3/23/2023



Map by Crow Wing County Highway Department.
For Questions or Information Contact County Hwy Dept at 218-824-1110.
For Information on State Highways Contact MnDOT at 218-828-5700.

2022/2023 Summary For Snow Event 12-2023-17

Date 3-22-23

| Salt Tons | Salt \$ | Sand Tons | Sand \$ | Brine gal | Brine \$ | Mat. Total | Equip \$ | Reg. Personnel | OT \$ |
|-----------|----------|-----------|---------|-----------|----------|------------|----------|----------------|---------|
| 90 | \$13,050 | 0 | \$0 | 1142 | \$754 | \$13,804 | \$23,595 | \$5,062.00 | \$2,442 |

Total \$44,903

10.0 Plow hrs.

\$4,490 per/hr.

160 Man hrs.

\$80 per/CL/mile

\$1.69 per/household for entire County

Forecast

3" of snow forecasted to begin falling at 4:00 pm 3-21-23 and continue until 3:00 am 3-22-23. Strong winds 10-30 mph. Temps around 30 degrees.

Pre Plan

Begin plowing at 3:00 am 3-22-23 and apply 200 lbs of salt on centerline.

Actual Event

Event start: 3-21-22 3:00PM

Event ended 3-22-23 6:00AM

Details/Comments

Snow began mid afternoon 3-21-23. The roads were warm and it melted as it fell. This continued until around 8 pm when the snow began to stick and accumulate. Plows began at 3:00 am 3-22. The snow ended around 6:00 am. The roads had some compaction but they broke quickly after plowing and targets were achieved quickly with the warm air and pavement temps. Wind was not a factor with the 5" of wet heavy snow.

Conditions

5" wet heavy snow.

| Road | Road Temp | Date | Time | Air Temp |
|--------|-----------|---------|---------|----------|
| Hwy 6 | 34 | 3/22/23 | 3:00am | 33 |
| Hwy 25 | 31 | 3/22/23 | 3:00am | 34 |
| Hwy 6 | 33 | 3/22/23 | 11:00am | 31 |
| Hwy 25 | 30 | 3/22/23 | 11:00am | 30 |

| Date | High | Low |
|-----------|------|-----|
| 3/20/2023 | 34 | 15 |
| 3/21/2023 | 34 | 30 |
| 3/22/2023 | 35 | 15 |
| 3/23/2023 | 35 | 9 |

Source: weather.com. Monthly Weather. 56401

Summary

Roads cleaned up well with warmer pavement temps.

Decisions Made

3:00 am start time worked well.

Lessons Learned

Could have started earlier as the pavement and air temps held warmer than forecasted. Only slight compaction that broke quickly once plowed.

Goals Met/Not Met

| Plowing | Goals |
|----------------|--------|
| Priority 1 Met | 6 hr. |
| Priority 2 Met | 8 hr. |
| Priority 3 Met | 10 hr. |

| Bare wheel paths | Goals |
|------------------|--------|
| Priority 1 Met | 18 Hr. |
| Priority 2 Met | 48 hr. |